TECHNICAL DATA SHEET

CyFlow™ CD98 Purified
Anti-Hu; Clone MEM-108

REF **CS074103**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD98
Alternative Names	4F2, FRP-1
Clone	MEM-108
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Raji cells: human Burkitt's lymphoma cell line

Specificity

The mouse monoclonal antibody MEM-108 recognizes CD98 antigen, a 125 kDa disulfide-linked heterodimer (80 kDa glycosylated heavy chain + 45 kDa non-glykosylated light chain). CD98 is expressed

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on T lymphocytes (upon activation) and activated NK cells; it is also present at low levels on B lymphocytes, NK cells, monocytes and platelets.

Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation
- Immunohistochmistry (paraffin-embedded sections)

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD98 (4F2) is a type II transmembrane glycoprotein which serves as the heavy chain of the heterodimeric amino acid transporters (HATs). CD98, linked to various light chains by disulfide bond, is responsible for cell surface expression and basolateral localization of this transporter complex in polarized epithelial cells and also interacts with β1 integrins and increases their affinity for ligand. Besides its roles in amino acid transport, CD98 is thus involved in cell fusion and activation. It is implicated in regulation of cellular differentiation, growth and apoptosis.

References

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- Cai S, Bulus N, Fonseca-Siesser PM, Chen D, Hanks SK, Pozzi A, Zent R: CD98 modulates integrin beta1 function in polarized epithelial cells. J Cell Sci. 2005 Mar 1; 118(5):889-99. < PMID: 15713750 >
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The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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